CIVIL-TECH CONSULTANTS AND ENGINEERS

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JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/W.No.10/KRIDL/CEMENT/2014-15

Date: 14.07.2014

TEST REPORT

CLIENT	:	**Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.
AGENCY	:	**Technical Manager,** KRIDL, Bangalore.
NAME OF THE WORK	:	Improvements to roads and drains at G.K. Muniyappa Garden in Ward No.10, BBMP, Bangalore.
REFERENCE	:	EE/BTP/KRIDL/W.O/474/2013-14 Dated: 21.02.2014
SAMPLE ID	:	CEMENT
SAMPLES SUPPLIED BY	:	AGENCY

The results of the tests conducted on the cement sample are as follows:

Sl.No	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 1989-2013
1	Standard Consistency	IS-4031 (Part -4)	29.00 %	-
2	a) Initial Setting Time	IS-4031 (Part -5)	135 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part -5)	480 Minutes	Not More than 600 Minutes
3	Soundness by the Le-Chatelier method	IS-4031 (Part 3)	1 mm	Not more than 10 mm

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Job No: CTCE/BBMP/W.No.10/KRIDL/SAND/2014-15 : 14.07.2

TEST REPORT ON FINE AGGREGATES
IS 383-1970 (RA- 2002)

Client : **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of Work : Improvements to roads and drains at G.K. Muniyappa Garden in Ward No.10, BBMP, Bangalore.

Reference : EE/BTP/KRIDL/W.O/474/2013-14 Dated: 21.02.2014

Date of Testing : 14.07.2014

Material : Sand Total Wt. of Aggregates in gms **1000**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limi For Zone-
10	0	0	0	100	100
4.75	50	5.00	5.00	95.0	90-100
2.36	150	15.00	20.00	80.0	75-100
1.18	215	21.50	41.50	58.5	55-90
600 Micron	182	18.20	59.70	40.3	35-59
300 Micron	150	15.00	74.70	25.3	8-30
150 Micron	195	19.50	94.20	5.8	0-10

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W.No.10/KRIDL/AGG/2014-15 : 14.07.2014

TEST REPORT ON COARSE AGGREGATES
IS 383-1970 (RA- 2002)

To : **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of Work : Improvements to roads and drains at G.K. Muniyappa Garden in Ward No.10, BBMP, Bangalore.

Reference : EE/BTP/KRIDL/W.O/474/2013-14 Dated: 21.02.2014

Date of Testing : 14.07.2014

Material : 40mm Aggregates

Total Wt. of Aggregates in gms **10000**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits
80	0	0	0	100	100
40	240	2.40	2.40	97.60	95-100
20	5260	52.60	55.00	45.00	30-70
10	2505	25.05	80.05	19.95	10-35
4.75	1610	16.10	96.15	3.85	0-5

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Job No:- CTCE/BBMP/W.No.10/KRIDL /STEEL/2014-15 16.07.2014

TEST REPORT ON REINFORCEMENT STEEL

Client	:	**Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.
Agency	:	**Technical Manager,** KRIDL, Bangalore.
Name of the Work	:	Improvements to roads and drains at G.K. Muniyappa Garden in Ward No.10, BBMP, Bangalore.
Reference	:	EE/BTP/KRIDL/W.O/474/2013-14 Dated: 21.02.2014
Date of Test	:	16.07.2014
Technical Reference	:	IS: 1786-2008

Sl. No	Nominal size (dia) (mm)	Mass per metre (Kg/mtr)	TENSILE STRENGTH			Bend Test	Rebend Test
			0.20% proof stress/Yield stress N/mm^2	Tensile strength (Ultimate stress) N/mm^2	Elongation percent gauge length		
1	8	0.40	510	552	13.05	O.K	O.K

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Lab Nos: CTCE/BBMP/W.No.10/KRIDL /STEEL/2014-15 16.07.2014

TEST REPORT ON REINFORCEMENT STEEL

Client	:	**Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.
Agency	:	**Technical Manager,** KRIDL, Bangalore.
Name of the Work	:	Improvements to roads and drains at G.K. Muniyappa Garden in Ward No.10, BBMP, Bangalore.
Reference	:	EE/BTP/KRIDL/W.O/474/2013-14 Dated: 21.02.2014
Date of Test	:	16.07.2014
Technical Reference	:	IS: 1786-2008

Sl. No	Nominal size (dia) (mm)	Mass per metre (Kg/mtr)	TENSILE STRENGTH			Bend Test	Rebend Test
			0.20% proof stress/Yield stress N/mm^2	Tensile strength (Ultimate stress) N/mm^2	Elongation percent gauge length		
1	10	0.62	513	556	13.35	O.K	O.K

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15.08.2014

TEST REPORT ON CONCRETE CUBES

Client	: **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.
Agency	: **Technical Manager,** KRIDL, Bangalore.
Name of the work	: Improvements to roads and drains at G.K. Muniyappa Garden in Ward No.10, BBMP, Bangalore.
Reference	: EE/BTP/KRIDL/W.O/474/2013-14 Dated: 21.02.2014
Sample ID	: RCC Drain Concrete
Size of cubes	: 150mmx150mmx150mm
Cross Sectional Area	: 22500 mm^2
Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
Grade of Concrete	: M_{20}
Compressive Strength as on	: 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	18.07.2014	15.08.2014	8.135	475.6	21.14
2	18.07.2014	15.08.2014	8.259	493.6	21.94
3	18.07.2014	15.08.2014	8.365	510.6	22.69

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TEST REPORT ON CONCRETE CUBES

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Agency	: **Technical Manager,** KRIDL, Bangalore.
Name of the work	: Improvements to roads and drains at G.K. Muniyappa Garden in Ward No.10, BBMP, Bangalore.
Reference	: EE/BTP/KRIDL/W.O/474/2013-14 Dated: 21.02.2014
Sample ID	: RCC Drain Concrete
Size of cubes	: 150mmx150mmx150mm
Cross Sectional Area	: 22500 mm^2
Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
Grade of Concrete	: M_{20}
Compressive Strength as on	: 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	21.07.2014	18.08.2014	8.278	482.3	21.44
2	21.07.2014	18.08.2014	8.355	495.6	22.03
3	21.07.2014	18.08.2014	8.452	516.3	22.95

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Reference	: EE/BTP/KRIDL/W.O/474/2013-14 Dated: 21.02.2014
Sample ID	: RCC Drain Concrete
Size of cubes	: 150mmx150mmx150mm
Cross Sectional Area	: 22500 mm^2
Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
Grade of Concrete	: M_{20}
Compressive Strength as on	: 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	23.07.2014	20.08.2014	8.115	478.6	21.27
2	23.07.2014	20.08.2014	8.235	502.3	22.32
3	23.07.2014	20.08.2014	8.358	518.3	23.04

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